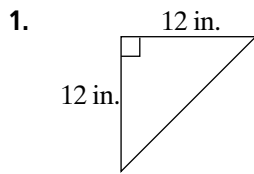


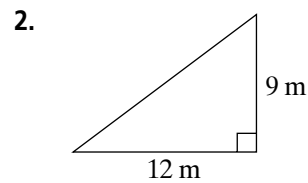
# Practice 3-3

## Using The Pythagorean Theorem

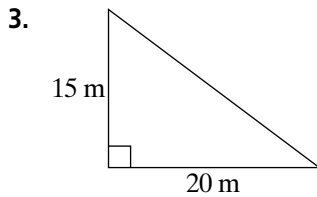
Find the missing leg length. If necessary, round the answer to the nearest tenth.



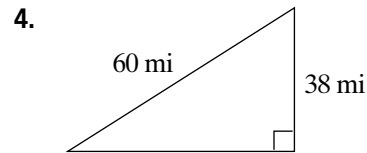
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For Exercises 5–14,  $a$  and  $b$  represent leg lengths and  $c$  represents the length of the hypotenuse. Find the missing leg length. If necessary, round to the nearest tenth.

5.  $a = 8$  cm,  $c = 12$  cm

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6.  $b = 9$  in.,  $c = 15$  in.

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7.  $b = 5$  m,  $c = 25$  m

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8.  $a = 36$  in.,  $c = 39$  in.

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9.  $a = 10$  m,  $c = 20$  m

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10.  $b = 24$  mm,  $c = 25$  mm

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11.  $a = 9$  yd,  $c = 41$  yd

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12.  $b = 10$  cm,  $c = 26$  cm

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13.  $b = 27$  yd,  $c = 130$  yd

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14.  $a = 11$  mi,  $c = 61$  mi

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15. One leg of a right triangle is 4 ft long and the hypotenuse is 5 ft long. Ritchie uses  $\sqrt{4^2 + 5^2}$  to find the length of the other leg. Is Ritchie correct in his approach? Why or why not?

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